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10/577,557	04/28/2006	Shinsuke Matsumoto	1033622-000022	8186
BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER	
			RIOJA, MELISSA A	
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			1796	
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The time period for reply, if any, is set in the attached communication.

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## Response to Arguments

The amendment filed to the specification filed September 3, 2010 is acknowledged and has been entered.

Applicant's arguments filed September 3, 2010 have been fully considered but they are not persuasive because:

- A) With regard to applicant's argument of unexpected results when methyliminobispropylamine (MIBPA) is used as an initiator, Waddington et al. expressly teaches the use of MIBPA-initiated polyols and therefore the superior results achieved with these polyols cannot be considered unexpected.
- B) Applicant cites comparative example 7 in Table 2 as evidence that unexpected results are achieved when polyol (D) is used in the claimed amount. However, to establish unexpected results over a claimed range, applicants should compare a sufficient number of tests both inside and outside the claimed range to show the criticality of the claimed range. *In re Hill*, 284 F.2d 955, 128 USPQ 197 (CCPA 1960) (MPEP 716.02(d)) In the instant case, one example in which the amount of polyol (D) used is outside the claimed range provides insufficient evidence to conclude that the improvements in properties are a direct result of the amount of polyol (D) used.
- C) Applicant argues that Waddington et al. teaches away from the claimed flexible foam because the reference teaches the average hydroxyl number of the

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disclosed polyol (b) [corresponding to applicant's polyol (D)] is in the range of 20 to 100 mg KOH/g when flexible foams are produced (Pages 8 – 9). However, Waddington et al. does not require the hydroxyl value to be in this range for the production of flexible foams but rather indicates the average hydroxyl number of the polyol (b) is "generally" in this range.

Waddington et al. additionally disclose suitable hydroxyl values for polyol (b) may fall within the range of about 300 to about 800 (Page 9, Lines 13 – 20). While the Office recognizes that Waddington et al. teaches hydroxyl values in this range are "generally" for the purpose of preparing rigid foams, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties - i.e. a flexible foam - would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure as to how to obtain the claimed properties with only the claimed ingredients.

D) In response to applicant's argument that that all illustrative amounts of polyol (b) in the examples are outside applicant's claimed range of 0.5 to 3 parts by weight, an invention is not bound by the examples provided. Waddington et al. teaches polyol (b) may be present in an amount of 0 - 95 weight percent (Page 8, Line 7 - 17).

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Furthermore, in Formulation B of Example 8, polyol G (a species of polyol (b) of Waddington et al.) is a propoxylated tetrol initiated with methyliminobispropylamine. Polyol G in Waddington et al. therefore corresponds to Polyol D set forth in instant Claims 1 and 3. Though Waddington et al. teaches Polyol G is used in an amount of 5 parts by weight, the Office submits that the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. In re Aller, 220 F.2d 454, 105, 105 USPQ 233 (CCPA 1955) (MPEP 2144.05) At the time of the invention, it would have been obvious to a person of ordinary skill in the art to optimize the amount of polyol (b2a). These polyols are indicated to be catalytically active and, if used in a large enough amount, will eliminate the need for a catalyst entirely. Accordingly, it would be obvious to adjust the amount of polyol (b2a) such that it falls closer to the lower limit of the claimed range when more control and a slower reaction rate is desired (Page 6, Lines 18 - 29; Page 12, Lines 27 - 30). A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 617 F.2d 272, 205, 205 USPQ 215 (CCPA 1980) (MPEP 2144.05)

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Correspondence

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to MELISSA RIOJA whose telephone number is (571)270-

3305. The examiner can normally be reached on Monday - Friday 8:30 AM - 5 PM E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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/MAR/

/Mark Eashoo/ September 7, 2010

Supervisory Patent Examiner, Art Unit 1796